Claims 18 - 31 have been newly added.

The examiner has objected to the underlining of "characterized in that." The underlined phrase has been deleted in this amendment.

The examiner has objected to multiple dependent claims being based on other multiple dependent claims. The examiner's attention is respectfully directed to the preliminary amendment which was filed with the application and which eliminated all multiple dependencies.

Claims 1 - 17 have been rejected under 35 U.S.C. §112 for failing to point out and distinctly claim the subject matter which application regards as the invention. The claims have been amended to make them more definite.

Turning now to the art, claims 1-11, 13 and 17 have been rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 5,764,114 to Harris. Claims 12 and 14-16 have been rejected under 35 U.S.C. §103 as obvious over Harris.

Harris discloses a cooking system having a control system 25, a command means 18-19, and a remote control 22. Proximity sensors 27 are positioned in correspondence with respective heating surfaces 16 of the appliance. "Intelligent" cooking implements 45, are equipped with a transceiver module 54 having a memory, battery, temperature sensor and a temperature display section 56, whereby the transceiver module 54 is able to communicate with the control system 25 of the appliance. An operator of Harris' appliance can

-2-

select a desired cooking program, and modify it, through the command means 18-19 and/or the remote control 22.

Harris' cooking system allows for precise and constant monitoring of the temperature within the "intelligent" cooking implements 45, and provides for automatic "transfer" of a previously entered cooking program when an "intelligent" implement is shifted from one heating surface 16 to a different one.

The placement of an "intelligent" cooking implement 45 on a heating surface "X", is detected by the relevant proximity sensor 27. The control system 25 then verifies whether the same cooking implement was previously positioned on a different heating surface "Y" of the appliance:

If the same cooking implement was previously positioned on a different heating surface "Y" of the appliance, the control system 25 automatically transfers to the heating surface "X" the cooking parameters (required temperature and cooking time) which had been previously manually set for the heating surface "Y", so that no new programming action is required by the user;

If the same cooking implement was not previously positioned on a different heating surface "Y" of the appliance, the control system 25 accepts from the user the necessary cooking parameters, which have to be set through knobs 18-19, or the remote control 22.

The use of a "dumb" implement on a heating surface is also detected by the control system 25 of Harris' appliance through the

corresponding proximity sensor 27. In this case, however, the control system does not receive any information from the implement (which has no transceiver module 54). Instead, the user is allowed to directly input the cooking parameters, through knobs 18-19, or the remote control 22.

In both the above cases, the user must set the initial cooking parameters of all of the available programs through the knobs or the remote control. Harris neither discloses nor suggests, the use of different operating programs, some of which are only selectable through use of an optional device.

The claimed function of the "external electronic device" of claim 1 can cannot be performed by the transceiver module 54 of the intelligent implements of Harris. Harris' transceiver module does not allow for selection and control of the performance of additional or "second" programs or functions. In Harris there is no stored additional or second set of programs. The programs to be run are always to be set through knobs 18-19 or the remote control 22.

In contrast with Harris, Applicant's invention relates to a generic household appliance (such as an oven, a washing apparatus, a refrigerating appliance), which can always perform a given number of first programs or functions, and optionally perform additional or second programs or functions. By interfacing an external and optional device, which is not necessary for the normal operation of the appliance, i.e. for performing the first programs or functions,

-4-

and without requiring any particular programming or setting-up, the household appliance is able to perform second programs or functions different from the first ones.

Both the first and the second programs or functions are stored in the control system of the appliance; however, while the first programs or functions can be selected through the usual command means, e.g., control panel, provided on the appliance, the second programs or functions can be selected only if the external device has been interfaced with the appliance.

Thus, for example, a user can buy an oven which has 20 programs in its memory, only 10 of which can be selected through the usual command means of the appliance (i.e., knobs, buttons, slider, etc.); at a later time, the user can decide to "increase" the capability of the oven, by interfacing it with the external device for selecting from the other 10 programs.

In some respects, the external device functions as a "key" to unlock the additional programs or functions which, otherwise, would remain in a "secret archive" of the control system of the appliance.

In prior art household appliances, the user is generally not permitted to modify the general structure of the basic programs (e.g., washing programs, cooking programs, refrigerating cycles, etc.) since this would incur a risk of erroneous settings. Only very limited control over selected parameters is permitted by the

-5-

user, such as the adjustment of a temperature, or a spin speed. In such appliances, the structure of the basic programs remains constant. Even where adjustments to parameters are permitted, the controlling programs usually contain boundaries or limits which cannot be crossed in order to prevent damage in the event of a mistaken setting made by the user.

Unlike Harris, in accordance with the invention, new functions can be added (such as receiving diagnostic information, advising about the expiry date of a food, etc.), in addition to parameters in existing programs, (e.g. washing cycles, cooking recipes, etc.) being modified, through application of an external device.

For the reasons stated above, it is respectfully submitted that claims 1-31, as amended, are allowable over the cited art.

The prior art cited but not applied in the rejection is deemed inapposite to the claims.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance. Early and favorable action is earnestly solicited.

Respectfully Submitted,
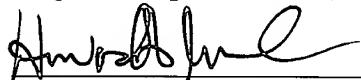
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-6-

1. A ~~c~~Control system for an appliance which processes household items ~~such as food, laundry, crockery and the like~~, said ~~household~~ appliance ~~(1) comprising~~ having an electronic control unit comprising

~~(2) and~~ selection means ~~(3)~~, ~~located in particular on a control panel of the appliance cabinet,~~ for the selection of predetermined first functions of said appliance,

means for storing first information for controlling execution of said first functions in response to selections made through said selection means ~~basic programs of said appliance (I), whereby, as part of said control system, a first set of information is stored in said electronic control unit (2) which are used by said electronic control unit (2), in function of selections made through said selection means (3), for controlling the~~,

means for storing second information for controlling the execution of second functions different from said first functions, and

connection means for interfacing with an external electronic device, said second information being accessible for enabling the selection of said second functions only when said external electronic device is operatively connected to said connection means ~~performance of said basic programs, characterized in that as a further part of said control system, a second set of information is stored in said electronic control unit (2), for enabling said apparatus to perform additional programs to those basic programs~~

~~which can be selected via said selection means (3), said electronic~~
~~control unit (2) being prearranged for interfacing with an external~~
~~electronic device (5; 9; 9A) which enables the selection and the~~
~~performance of said additional programs~~.

2. A c~~C~~ontrol system, according to claim 1, ~~characterized in that~~wherein said electronic control unit ~~(2)~~ comprises memory means ~~(M)~~, ~~where~~ said first means for storing said first information comprising~~in~~ a first area ~~(N)~~ of said memory means ~~(M) said first set of information~~, ~~are stored and where~~ and said means for storing said second set of information comprising~~in~~ a second area ~~(A)~~ of said memory means ~~(M) said second seto of information are stored, used by the control system to interpret and/or convert into actions data from~~accessible by said external electronic device ~~(5; 9; 9A)~~ for receiving from said external electronic device data for enabling execution of said second functions.

3. A c~~C~~ontrol system, according to claim 1, ~~characterized in that~~wherein said interfacing me~~o~~ans ~~(4; 4A) are provided for allowing the~~ is ~~connection~~ operatively connectable ~~between~~ to said electronic unit ~~(2)~~ and said external electronic device~~(5; 9; 9A)~~.

4. A c~~C~~ontrol system, according to claim 3, ~~characterized in that~~wherein said interfacing means comprise~~s~~ an interfacing module ~~(4; 4A), to be associated with~~mounted on said electronic unit~~(2)~~.

5 (amended). ─A c~~C~~ontrol system, according to claim 1, ~~characterized in that~~wherein said electronic unit ~~(2)~~ comprises a microcontroller having a commun~~u~~ication line operatively connectible to said external devices~~.

6 (amended). A c~~C~~ontrol system, according to claim 1, ~~characterized in that~~wherein said electronic unit ~~(2) is~~ comprises means for ~~provided to transmit~~ transmitting information relating to the operating status of the household appliance ~~(1)~~.

7 (amended). A c~~C~~ontrol system, according to claim 1~~6~~, ~~characterized in that~~wherein said external device ~~(5; 9; 9A)~~ ~~is~~ comprises means for ~~provided for receiving~~ receiving ~~said~~ information relating to the operating status of the household appliance ~~(1)~~.

8 (amended). A c~~C~~ontrol system, according to claim 1~~1~~, ~~characterized in that~~wherein said external device ~~(5; 9; 94)~~ comprises a display device.

9 (amended). A c~~C~~ontrol system, according to claim 8~~7~~, ~~characterized in that~~wherein said external device ~~is provided for~~ display~~s~~ing on said display device ~~said~~ status information relating to the operating status of the household appliance ~~(1)~~.

10 (amended). Control system, according to claim 1, ~~characterized in that~~wherein said household appliance ~~(1)~~ comprises a first clock, ~~that~~ and said external device ~~(5; 9; 9A)~~ comprises

a ~~battery and a relevant~~ second clock, ~~and that said external~~ ~~device (5; 9; 9A) is provided~~ for updating the the first clock ~~of~~ ~~the household appliance (1)~~.

11 (amended). Control system, according to claim 1, ~~characterized in that~~wherein said external device ~~(5; 9; 9A) is~~ comprises a ~~Personal~~ personal ~~Computer~~ computer~~(5)~~.

12 (amended). Control system, according to claim 11, ~~characterized in that~~ further comprising a data bus operatively connectible to said ~~Personal~~ personal ~~Computer~~ computer ~~(5) is~~ ~~connected with~~ and said household appliance~~ (19) through a data~~ ~~bus, in particular a power-line carrier system~~.

13 (amended). Control system, according to claim 1, ~~characterized in that~~wherein said external device ~~(5; 9;9A) is~~ comprises a remote control~~(9; 9A), in particular of the infrared~~ ~~or radio-frequency type,~~ and ~~that~~ said interfacing~~,~~ means comprises a signal receiver ~~(4A)~~ for receiving signals from said remote control.

14 (amended). Control system, according to claim 1, ~~characterized in that~~wherein said external device comprises means for storing a management program ~~is provided, supplied on a~~ ~~suitable support (6), for said external device (5; 9; 9A),~~ for ~~an~~ ~~easy setting of~~executing said ~~additional functions~~second functions ~~through said optional device (5; 9; 9A)~~.

9

15 (amended). Control system, according to claim 14, ~~characterized in that~~wherein said management program ~~provides~~ comprises control routines for avoiding ~~the wrong or~~ improper programming of the household appliance ~~(1)~~.

16 (amended). Control system, according to claim 15, ~~characterized in that~~wherein said management program comprises utilit~~ies~~y functions for ~~the use of~~ the household appliance ~~(1), such as a cook book for the use of an oven or a database for the food preserved in a refrigerator~~.

17. Method for programming an electronically controlled appliance ~~(1)~~ for processing household items ~~such as food, laundry, crockery and the like, said appliance (1) being able to perform basic~~ by performing first ~~—~~functions and ~~additional~~ second functions, comprising ~~where said basic functions can be selected by standard control means (3) comprised in said household appliance (1),~~ storing a first set of information ~~being stored~~ in ~~an electronic control unit~~a first portion of a memory, ~~(2), which are used by said electronic control twit (2), in function of selections made through standard~~ and accessing said first portion of said memory to ~~control means (3), for controlling the~~ performance ~~of~~ said ~~basic~~first ~~programs~~functions, ~~and~~storing ~~whereby~~ a second set of information ~~is stored in said electronic control unit~~in a second portion of said memory ~~(2)~~, for enabling said ~~apparatus~~

10

appliance to perform ~~additional   programs~~ said second functions,

and executing ~~to those basic programs which can be selected via said~~

~~selection means (3) characterized in that the selection of the~~

~~additional programs is simplified~~ said second functions only by

interfacing ~~the use of~~ an external electronic device ~~(5; 9; 9A), to~~

~~be interfaced~~ with said ~~electronic control unit~~memory ~~(2), the~~

~~selection of said additional program being possible only through~~

~~the the use of said external electronic device (5; 9; 9A)~~.